

Title 13

PUBLIC SERVICES

Chapters:

13.04 Water and Sewer Code

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Chapter 13.04

WATER AND SEWER CODE

Sections:

13.04.010 Adopted by reference.

13.04.020 Unlawful acts—Penalty.

13.04.010 Adopted by reference.

The Water and Sewer Code of the City of Douglas, 1975, is adopted by reference thereto. There are now on file and of record in the office of the city clerk three copies thereof. (Ord. 405 § 1, 1975)

13.04.020 Unlawful acts—Penalty.

It is unlawful and a misdemeanor to do or permit to be done any of the following acts, which violation shall be punishable by a fine not exceeding three hundred dollars and/or imprisonment not exceeding six months. The penalties imposed by the water and sewer code may be enforced in addition to any criminal prosecution for violation of any of the following provisions:

A. No person shall place upon or about, any valve, valve box, curb cock, water meter box or water gate connected with the water system of the city any object, material, debris or structure of any kind that shall prevent free access to the same at all times or in any manner tamper with or injure such appurtenances. No person shall fill up or cover over any valve or meter box.

B. It is unlawful for any person intentionally to break, deface or damage any hydrant, valve, pipe or other water works appliance or fixture or in any other manner interfere with the operation of any part of the water system of the city.

C. No person other than an official or employee of the water and sewers department shall turn on water from the city mains without written permission from the superintendent.

D. It is unlawful for any authorized person to knowingly have and keep in his possession or under his control any valve key or hydrant wrench to the city water supply system and no person shall, without authority from the water and sewers department, make, construct, buy, sell or in any way dispose of to any person or entity any valve key or hydrant wrench for use on the city water supply system.

E. It is unlawful for any person to obstruct the access to any fire hydrant by placing around, or within twenty feet of such hydrant, any stone, brick, lumber, dirt, rubbish or other material or to open or operate any fire hydrant or to draw or attempt to draw water or to wilfully or carelessly injure such hydrants or in any manner to tamper with or injure such hydrants.

F. It is unlawful for any person to cause a connection to be made or to allow one to exist for any purpose whatsoever between the city water supply and any other source of water supply without the approval of the water and sewers superintendent, the city building official and the health authority having jurisdiction.

G. No person shall connect any pipe, tube or other instrument with any main, surface pipe, conduit or flume for conducting water belonging to the city, for the purpose of taking water from such without a permit from the proper authorities of the city.

H. Any person who in any manner wilfully defaces, damages, illegally uses or interferes with the operation of any well, pump, hydrant, valve, pipe, construction trench or any other water works facility, or anyone who shall pollute the potable water supply of the city

shall be guilty of a misdemeanor punishable as provided in this section.

I. It is unlawful for any person to deposit, or permit to be deposited, in an unsanitary manner, or upon public or private property within the city, or in any area under the jurisdiction of the city, any human or animal excrement or other objectionable waste.

J. Except as provided in the city water and sewer code it is unlawful to construct or maintain within the city any privy, privy vault, septic tank, cesspool or other facility intended or used for the disposal of sewage.

K. Every person who shall in any way interfere with employees of the water and sewers department in any discharge of their duties, either in the tapping of any sewer pipe, main or lateral belonging to the city, or the cleaning, laying or connecting of any such pipe or main or lateral, or who shall dig up or cause to be dug up, any street or alley in the city for the purpose of connecting with the sewer system of the city without first obtaining a permit from the water and sewers superintendent, or who, having a permit, shall dig up any portion of any street or alley of the city for the purpose of connecting with the sewer system of the city and shall fail or neglect to place the street or alley in its original condition, or who shall maliciously or wilfully break, damage, destroy, uncover, deface or tamper with any structure, appurtenance or equipment which is a part of the municipal sewage works shall be guilty of a misdemeanor.

L. No unauthorized person shall uncover, make any connections with or opening into, use, alter or disturb any public sewer or appurtenance thereof without first obtaining a written permit from the water and sewers department.

M. No person shall discharge or cause to be discharged any storm water, surface water, ground water, roof runoff, subsurface drainage, cooling water or unpolluted industrial process waters into any sanitary sewer.

N. Except as provided in the city water and sewer code no person shall discharge or cause to be discharged any of the following described waters or wastes into any public sewer:

1. Any liquid or vapor having a temperature higher than one hundred fifty degrees Fahrenheit.

2. Any water or waste which may contain more than one hundred parts per million by weight of fat, oil or grease.

3. Any gasoline, benzene, naphtha, fuel oil or other flammable or explosive liquid, solid or gas.

4. Any garbage that has not been properly shredded.

5. Any ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, paunch manure, grits, such as brick, cement, onyx, carbide or any other solid or viscous substance capable of causing obstruction to the flow in sewers or other interference with the proper operation of the sewage works.

6. Any waters or wastes having a pH lower than five and one-half or higher than nine and one-half or having any other corrosive property capable of causing damage or hazard to structures, equipment and personnel of the sewage works.

7. Any waters or wastes containing a toxic, radioactive or poisonous substance in sufficient quantity to injure or interfere with any sewage treatment process, constitute a hazard to humans or animals, or create any hazard in the receiving waters of the sewage treatment plant.

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8. Any waters or wastes containing dissolved or suspended solids of such character and quantity that unusual attention or expense is required to handle such materials at the sewage treatment plant.

9. Any noxious or malodorous gas or substance capable of creating a public nuisance.

O. No person, except an authorized employee of the water and sewers department, shall have or exhibit any credentials of the water and sewers department. It shall be the duty of each employee of the department, upon resignation or dismissal, to deliver and surrender at the office of the superintendent of the water and sewers department all credentials of the department in his possession. (Ord. 405 § 5, 1975)

Chapter 13.08

WATER AND WASTEWATER SERVICE FEES AND CHARGES

Sections:

- 13.08.005 Rates established.**
- 13.08.010 Water meter installation charges.**
- 13.08.020 Rates for water usage.**
- 13.08.030 Monthly service charge for metered water use.**
- 13.08.040 Miscellaneous charges.**
- 13.08.050 Monthly sewer rates.**
- 13.08.060 Sewer connection fees.**

13.08.005 Rates established.

Effective with the first bills issued by the city for water and wastewater services supplied after September 1, 1999, the rates, fees and other charges charged to customers and users of the city of Douglas water and wastewater services shall be as set out in the "Schedule of Charges for Water and Wastewater Services" and Attachments 1 and 2 thereto (collectively the "Schedule of Charges") which are attached to the ordinance codified in this chapter as Exhibit A and incorporated herein by reference. The minimum monthly charges set out in the schedule of charges reflect the present fees, rates and charges for water and wastewater services plus additional monthly capital improvement surcharges for water and wastewater services. As shown on Attachments 1 and 2 to the schedule of charges, the capital improvement surcharges will be imposed for a period of eight years, commencing September 1, 1999 and ending August 30, 2007. The monthly amount of the surcharges will be one dollar for water service and one dollar for wastewater service during the first twelve

months, with the monthly charge increasing by one dollar per year every year thereafter for five years. The amount of the monthly service charges plus capital improvement surcharges on August 30, 2004 shall remain in effect until August 30, 2007, when the surcharge will terminate. (Ord. 794 § 1, 2001)

13.08.010 Water meter installation charges.

A. A one-time installation charge shall be assessed for each water meter installed or supplied by the city, based on the following schedule:

Meter Size	Installation Charge
3/4 inch or smaller	\$ 300.00
1 inch	350.00
1 1/2 inch	470.00
2 inch	525.00
3 inch	895.00
4 inch	1,120.00
6 inch	1,510.00

B. Expense for each meter will be in addition to the above charges and will change periodically as prices on meters are increased. The charge for the installation of fire hydrants will be one thousand dollars plus the cost of the hydrant itself. (Ord. 755 Exh. A (part), 1999)

13.08.020 Rates for water usage.

A. City residents shall pay eighty cents per thousand gallons for metered water consumed, plus all applicable state, county and city sales taxes.

B. Water users outside the corporate limits of the city shall pay eighty-five cents per thousand gallons for metered water consumed

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plus applicable state, county and city sales taxes.

C. Water required for construction or other purposes and supplied through a fire hydrant meter or through the use of unmetered water that has been approved pursuant to Sec. 1-13 of the City Water and Sewer Code, shall pay the rate of two dollars per thousand gallons of water consumed plus applicable state, county and city sales taxes.

D. All water furnished to the city for park irrigation, street sprinklers, fire hydrants or the unmetered uses shall be charged to the city department using the water at the city's monthly gross operating cost per thousand gallons, so that the city will be able to account for all water furnished to any and all users. State, county and city sales taxes will be charged as applicable. (Ord. 755 Exh. A (part), 1999)

13.08.030 Monthly service charge for metered water use.

A. Service Inside City Limits. In addition to the cost of the water supplied, the following monthly service charges shall be assessed against each account supplied with a water meter for each meter located within the city limits:

Meter Size	Monthly Service Charge		
	Service Charge	Capital Improvement Surcharge	Total Per Month (9/1/99-9/30/00)
3/4 inch or smaller	\$ 5.50	\$1.00	\$ 6.50
One inch	\$ 7.50	\$1.00	\$ 8.50
One and 1/2 inch	\$ 9.00	\$1.00	\$10.00

Meter Size Monthly Service Charge

	Service Charge	Capital Improvement Surcharge	
		Capital Improvement Surcharge	Total Per Month (9/1/99-9/30/00)
Two inch	\$10.50	\$1.00	\$11.50
Three inch	\$14.50	\$1.00	\$15.50
Four inch	\$18.50	\$1.00	\$19.50
Six inch	\$26.50	\$1.00	\$27.50

This monthly capital improvement surcharge will increase by one dollar per month per year for a period of five years, as set out in Attachment 1 attached to the ordinance codified in this chapter. The capital improvement surcharge will end on August 30, 2007. The amount of the monthly service charge plus capital improvement surcharge on August 30, 2004, shall remain in effect until August 30, 2007, when the surcharge will terminate.

B. Service Outside City Limits. Consumers of water outside the city limits shall be charged the monthly service charge set out above for service within city limits, plus an additional service availability charge of four dollars per month per meter connection.

C. Private Fire Connections. Private fire connections of the emergency automatic sprinkler type, if connected without meters, shall be charged a monthly charge of four dollars per inch of diameter, instead of the charges set out above. (Ord. 794 § 2, 2001; Ord. 755 Exh. A (part), 1999)

13.08.040 Miscellaneous charges.

A. Application Fee. An applicant for city water and/or wastewater services shall file with the city an application made on a form provided by the city and proper proof of identity and shall pay a nonrefundable ten dollars application fee to cover the admini-

strative costs of processing the application. A new application form and ten dollars application fee shall be required upon any transfer of ownership or other change in the party or parties responsible for the water service charges.

B. Turn-off Fee. A turn-off fee of ten dollars shall be assessed against an account each time water service is disconnected by the city for failure to pay all due and delinquent charges. If water service is reestablished without city authorization and without payment of all outstanding fees and charges, the city shall again disconnect the water service and assess an additional ten dollars turn-off fee.

C. Damage to Meters. If a water meter is damaged as a result of unauthorized reestablishment of water service or other cause other than normal wear and tear, the reasonable cost of repairing or replacing the meter shall be assessed against the account serviced by that meter. (Ord. 755 Exh. A (part), 1999)

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13.08.050 Monthly sewer rates.

A. Service Inside City Limits. The following monthly service charges shall be assessed for use of the city wastewater system where the property serviced is within the city limits:

Type of Property	User Rate	Service Charge	Capital Improvement Surcharge	Monthly Total 9/1/99-8/30/00
Residential	\$5.82	\$.93	\$1.00	\$ 7.75
Commercial 1 0-200,000 gal	\$11.42	\$.93	\$1.00	\$13.35
Commercial 2 200,000-400,000 gal	\$22.77	\$.93	\$1.00	\$24.70
Commercial 3 400,000-600,000 gal	\$34.12	\$.93	\$1.00	\$36.05
Commercial 4 600,000-800,000 gal	\$45.47	\$.93	\$1.00	\$47.40
Commercial 5 over 800,000 gal	\$56.82	\$.93	\$1.00	\$58.75
plus \$4.71 per 100,000 gal over 1,000,000 gal. per year				
Industrial	\$19.52	\$.93	\$1.00	\$21.45
plus \$4.71 per 100,000 gal over 300,000 gal. per year				
School, 12 month period, per student	\$0.15	\$.93	\$1.00	- -

This monthly capital improvement surcharge will increase by one dollar per month per year for a period of five years, as set out in Attachment 2 attached to the ordinance codified in this chapter. The capital improvement surcharge will end on August 30, 2007. The amount of the monthly service charge plus capital improvement surcharge on August 30, 2004, shall remain in effect until August 30, 2007, when the surcharge will terminate.

B. Wastewater Service Outside City Limits. The following monthly service charges shall be assessed for use of the city wastewater system where the property serviced is outside the city limits:

Type of Property	User Rate	Service Charge	Surcharge	Cap. Imp. Surcharge	Monthly Total 9/1/99- 8/30/00
Residential	\$ 6.82	\$.93	\$5.75	\$1.00	\$14.50
Commercial 1 0-200,000 gal	\$13.42	\$.93	\$9.00	\$1.00	\$24.35
Commercial 2 200,000-400,000 gal	\$26.77	\$.93	\$9.00	\$1.00	\$37.65
Commercial 3 400,000-600,000 gal	\$40.02	\$.93	\$9.00	\$1.00	\$50.95
Commercial 4 600,000-800,000 gal	\$53.32	\$.93	\$9.00	\$1.00	\$64.25
Commercial 5 over 800,000 gal	\$66.62	\$.93	\$9.00	\$1.00	\$77.55
plus \$4.71 per 100,000 gal over 1,000,000 gal. per year					
Industrial	\$22.87	\$.93	\$13.50	\$1.00	\$38.30
plus \$4.71 per 100,000 gal over 300,000 gal. per year					
School, 12 month period, per student	\$0.15	\$.93	\$.15	\$1.00	- -

This monthly capital improvement surcharge will increase by one dollar per month per year for a period of five years, as set out in Attachment 2 attached to the ordinance codified in this chapter. The capital improvement surcharge will end on August 30, 2007. The amount of the monthly service charge plus capital improvement surcharge on August 30, 2004, shall remain in effect until August 30, 2007, when the surcharge will terminate. (Ord. 794 § 3, 2001; Ord. 755 Exh. A (part), 1999)

13.08.060

13.08.060 Sewer connection fees.

A. Formula for Determining Residential Fees. The fee for residence connection to city sewer is the nominal width of the residential lot multiplied by the cost per foot of the sewer connection. In order to determine the connection fee, the following steps shall be followed:

1. Calculate the gross cost per foot of sewer line by taking the average price of eight inch sewer pipe, adding installation costs equal to the price of the sewer pipe, plus fifteen percent of that total for manholes and street crossings and then adding another fifteen percent of that subtotal for engineering, contingencies and overhead. As a mathematical formula, this calculation can be stated as:

$$\text{cost per foot} = (P + I + 15\%) + 15\%$$

(where P is the cost of 8" sewer pipe, I is the installation cost figured at 100% of P, the first 15% is the cost of manholes and street crossings and the second 15% covers engineering, contingencies and overhead.)

2. Determine if the sewer line will serve property on both sides of the alley. If so, divide the cost per foot in two to determine the proper cost to each lot.

$$\text{cost per foot per lot served} = \frac{(P + I + 15\%) + 15\%}{2}$$

3. Determine the connection fee by multiplying the cost per foot by the nominal width of the lot to be connected.

B. Fees Established Pursuant to Formula.

Price of 8" sewer pipe:	\$4.55
add installation cost @ 100%	<u>\$4.55</u>
	\$9.10

Add 15% for manholes and street crossings	\$ <u>1.37</u>
	\$10.47

Add 15% for engineering, contingencies & overhead	\$ <u>1.57</u>
	\$12.04

divide by 2 to allocate cost to each lot served (if line serves both sides of alley)	$\frac{\$12.04}{2} = \6.02
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Connection Cost per Foot of Lot Width: \$6.00

C. Connections to Nonresidences. The same method and factors used to calculate residence connection fees will apply when calculating connection fees for other than a residence. After calculating the cost per foot, an additional ten percent will be added to the total amount.

D. Work to be Done by Owner. All work to connect the property to the main will be done by the property owner in accordance with city specifications.

E. Review of Costs. The sewer connection fee will be reviewed annually and revised, if necessary, to cover estimated current construction costs. (Ord. 755 Exh. A (part), 1999)

Chapter 13.12

BACKFLOW AND CROSS- CONNECTIONS

Sections:

- 13.12.010 Purpose.**
- 13.12.020 Definitions.**
- 13.12.030 Application.**
- 13.12.040 Class 1 and Class 2 fire sprinkler systems.**
- 13.12.050 Temporary waiver of permit fees for existing single-family residences.**
- 13.12.060 Termination of water service.**
- 13.12.070 Notice of discontinuance of service.**
- 13.12.080 Assembly requirement, maintenance and repair.**
- 13.12.090 Inspections.**
- 13.12.100 Assembly installation.**
- 13.12.110 Testing.**
- 13.12.120 Records.**
- 13.12.130 Fees.**
- 13.12.140 Exceptions not permitted.**
- 13.12.150 Limitation.**
- 13.12.160 Conflict with other ordinances or codes.**

13.12.010 Purpose.

It is the purpose of this chapter:

- A. To protect the public water supply served by the city water department from the possibility of contamination or pollution by isolating, within its customers internal distribution system, such contaminants or pollutants which could backflow or back-siphon into the city's water distribution system;
- B. To promote the elimination or control of existing cross-connections, actual or potential,

between its customers in-plant potable water system and nonpotable systems; and

C. To provide for the maintenance of a continuing program of backflow prevention and cross-connection control which will effectively prevent the contamination or pollution of all potable water systems by cross-connection. (Ord. 626 § 1, 1993)

13.12.020 Definitions.

As used in this chapter:

A. "Approved backflow prevention assembly" means a backflow prevention assembly of the size and type approved by the water and sewer department, that has completely met the laboratory and field performance specifications of the Foundation for Cross-Connection Control and Hydraulic Research of the University of Southern California as are published from time to time and, where on a fire system, has Underwriters Laboratory and Factory Mutual approval, or as otherwise described, limited or provided in Section 13.12.100 of this chapter.

B. "Auxiliary water supply" means any water supply on or available to the premises other than the city's approved public water system. These auxiliary waters may include "used water" or "industrial fluid."

C. "Backflow" means the reversal of the flow of water or mixture of water and other liquids, gases or other substances into any part of the city's water distribution system.

D. "Backflow prevention assembly" or "assembly" means a device or means designed to prevent backflow and includes:

- 1. Air-Gap. The unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet supplying water to a tank, plumbing fixture, or

other device and the flood level rim of the vessel. An approved air-gap shall be at least double the diameter of the supply pipe, measured vertically, above the top of the overflow rim of the vessel, and, in no case less than one inch.

2. **Reduced Pressure Principle Assembly.** An assembly of two independently operating approved check valves with an automatically operating differential relief valve between the two check valves, plus properly located test cocks for the testing of the check and relief valves. The entire assembly shall have been manufactured in full compliance with the American Water Works Association Standards (C511-89) for reduced pressure principle assemblies. The device shall operate to maintain the pressure in the zone between the two check valves at a level less than the pressure on the city's water supply side of the device. At cessation of the normal flow the pressure between the two check valves shall be less than the pressure on the city's water supply side of the device. In case of leakage of either of the check valves the differential relief valve shall operate to maintain the reduced pressure in the zone between the check valves by discharging to the atmosphere. To be approved, these devices must be readily accessible for in-line maintenance and testing and be installed in a location where no part of the device will be submerged. An acceptable method of handling discharge water from the device must be approved by the water and sewer department.

3. **Double Check Valve Assembly.** An assembly of two independently operating approved check valves with tightly closing shut-off valves on each end of the check valve. The entire assembly must have been manufactured in full compliance with the American Water Works Association Standard

(C510-89) for double check valve assemblies. To be approved, these devices must be readily accessible for in-line maintenance and testing.

4. **Double Check-Detector Check Valve Assembly.** A specially designed assembly composed of a line-size approved double check valve assembly with a specific bypass five-eighths inch by three-fourths inch or three-fourths inch water meter and a three-fourths inch approved double check valve assembly. The meter shall register all rates of flow. This assembly shall only be used to protect against a non-health hazard.

5. **Pressure Vacuum Breaker Assembly.** An assembly containing an independently operating, loaded check valve and an independently operating, loaded air inlet valve located on the discharge side of the check valve. The assembly shall be equipped with properly located test cocks and tightly closing shut off valves located at each end of the assembly.

6. **Atmospheric Vacuum Breaker.** An assembly containing a float check, a check seat and an air inlet port. The flow of water into the body causes the float to close the air inlet port. When the flow of water stops, the float falls and forms a check valve against backsiphonage and at the same time opens the inlet port to allow air to enter and satisfy the vacuum. A shutoff valve immediately upstream is also required. An atmospheric vacuum breaker is designed to protect against a health hazard under a backsiphonage condition only. This assembly is also known as the nonpressure type vacuum breaker.

E. "Certified general tester" means a person who holds a valid General tester certification issued by the California-Nevada American Water Works Association Section, the Arizona State Environmental Technical

Training Center or other certifying authority approved by the Arizona Department of Environmental Quality.

F. "Cross-connection" means a cross-connection as defined in Section 104-M of the Uniform Plumbing Code as amended and as adopted by the city from time to time.

G. "Industrial fluids" means any fluid or solution which may be chemically, biologically or otherwise contaminated or polluted in a form or concentration such as would constitute a health, system, pollutant, or plumbing hazard if introduced into the city's water distribution system. This may include, but is not limited to: polluted or contaminated waters; all types of process waters and used waters originating from the city's water distribution system which may have deteriorated in sanitary quality; chemicals in fluid form, plating acids and alkalies, circulated cooling waters connected to an open cooling tower and/or cooling towers that are chemically or biologically treated or stabilized with toxic substances; contaminated natural waters; oils; gases; glycerin; paraffins; caustic and acid solutions; and other liquid and gaseous fluids used in industrial or other purposes or for firefighting purposes.

H. "Used water" means any water supplied by the city to a customer's water system after it has passed through the point of delivery and is no longer under the sanitary control of the city. (Ord. 626 § 5, 1993)

13.12.030 Application.

A. Except as provided in this section, the provisions of this chapter shall apply to all existing, new or replacement service connections to the city's water distribution system. Approved backflow prevention assemblies shall be installed on all existing

service connections by July 1, 1994 unless the Arizona Department of Environmental Quality approves an installation at a later date.

B. The provisions of this chapter shall not apply to existing single-family residences used solely for residential purposes unless a backflow, backsiphonage or cross-connection problem is identified at a particular residence by inspection or site survey. In the event such a problem is identified, the provisions of this chapter shall apply to that particular single-family residence.

C. Any water truck, wagon or tanker that is filled through any unprotected connection to the city's water distribution system, such as a fire hydrant or water hose, shall be equipped with a reduced pressure backflow prevention assembly or an air-gap separation. Such assemblies shall be subject to the provisions of this chapter.

D. Customers with an existing Class 1 or Class 2 fire sprinkler systems constructed of nonpotable material, which does not have an approved backflow prevention assembly at the time the ordinance codified in this chapter becomes effective, may elect to conduct the annual valve confidence - main drain test and first draw water sample procedures provided in Section III in lieu of installing an approved backflow prevention device.

E. In no event shall a fire protection system be out of service for more than eight consecutive hours for any of the testing, maintenance or repairs required by this chapter. The Douglas fire department shall be immediately notified of any change in the service status of a fire protection system. (Ord. 626 § 2, 1993)

13.12.040 Class 1 and Class 2 fire sprinkler systems.

A. This section applies to customers making the election provided by Section 13.12.030 above. All procedures provided in this section must be conducted by a licensed L16 contractor. This option requires an annual valve confidence - main drain test and first draw water sample and is comprised of two parts: (1) an annual fire protection system and valve inspection and (2) an annual first draw water sample collection. The main drain test must be conducted in accordance with the National Fire Prevention Association (NFPA) 25 (1992 Edition). The valve confidence test requires the disassembly of the single check valve to determine if the valve components are in a good working order and function as designed. A reading of pressure gauges to observe differential pressures on each side of the single check valve is not sufficient to meet the requirements of this section. Results of the test must be sent to the water and sewer department and the Douglas fire department within thirty days from the date of the test on forms approved by the water and sewer department.

B. An annual first draw water sample must be collected at the same time as the annual valve confidence - main drain tests. Two water samples must be collected for the Safe Drinking Water Act (SDWA) primary contaminant heavy metals and bacteriological (total coliform, presence/absence) analyses. These water samples must be taken from the upstream (supply) side of the fire protection system before any other water is run from the system. Proper sampling protocol must be followed and chain-of-custody of the water samples must be maintained. The analyses

must be performed by a certified laboratory. Lab results must be sent to the water and sewer department and the Douglas fire department with forty-five days from the date of sampling.

C. The single check valve may continue in place indefinitely following each annual valve confidence test and first draw water sample so long as the valve is operable and no upstream (supply side) SDWA maximum contaminant level (MCL) has been exceeded. In the event either of the water sample analysis results exceeds a SDWA MCL, the single check valve shall be immediately replaced with an approved double check valve assembly. A failed main drain test shall require immediate corrective action in accord with all applicable state and local fire codes or as directed by the Douglas fire department. (Ord. 626 § 3, 1993)

13.12.050 Temporary waiver of permit fees for existing single-family residences.

It is anticipated that state regulations will require the installation of backflow prevention devices on all single-family residences in the foreseeable future. Therefore, in order to encourage the voluntary installation of backflow prevention devices, the city shall waive the usual permit fees for the installation of such devices in existing single-family residences for a period of one year from the effective date of the ordinance codified in this chapter. (Ord. 626 § 4, 1993)

13.12.060 Termination of water service.

A. Water service to any premises connected to the city's water distribution system shall be terminated, after the notice provided in Section 13.12.070, upon a determination by the water and sewer department that one or more of the

conditions identified in subsection (B)(1), (2), (3) or (4) of this section exists. Water service shall not be resumed at such premises until the water and sewer department determines that such conditions have been corrected.

B. Water service to a fire protection system shall not be subject to discontinuance under this section. Any customer failing to correct a condition identified in subsections (B)(1), (2), (3), (4) or (5) in a connection to a fire protection system shall be assessed a fine in the amount of one hundred dollars for each day in which the condition continues to exist after thirty days from the date of notice provided in Section 13.12.070.

1. An unprotected cross-connection exists on the premises; or

2. An approved backflow prevention assembly has not been installed as required by this chapter, is not working, has been altered, removed or bypassed or is found to otherwise require the disconnection of the premises from the city water distribution system by a certified inspector provided in Section 13.12.090; or

3. A backflow, backsiphonage or cross-connection problem is identified at a single-family residence;

4. A test record of a backflow prevention assembly, as required by Section 13.12.120 of this chapter, has not been submitted to the water and sewer department; or

5. A record of the annual valve confidence - main drain test and first water sample is not submitted as required by Section 13.12.040 of this chapter. (Ord. 626 § 6, 1993)

13.12.070 Notice of discontinuance of service.

The city shall give written notice to any customer in violation of the provisions of

Section 13.12.060 of this chapter stating the nature of the violation and the date on which water service to the premises will be terminated. Except in the case of an emergency, such notice shall be given at least thirty days prior to termination of service. Notice herein shall be deemed given when deposited in the United States mail at Douglas, Arizona, postage paid, and addressed to the water customer at whose premises the violation is alleged to have occurred as such customer's address appears on the record of customers maintained by the city for water billing purposes. Any violation which involves an immediate danger of potentially allowing any substance into the city water distribution system shall constitute an emergency and the notice provided herein shall not be required prior to terminating water service. (Ord. 626 § 7, 1993)

13.12.080 Assembly requirement, maintenance and repair.

A. Except as provided in Section 13.12.030, all existing, new or replacement service connections to the city water distribution system shall be fitted with approved backflow prevention assemblies. Approved backflow prevention assemblies shall be installed in each new single-family residence constructed after the effective date of the ordinance codified in this chapter. All assemblies shall be installed and continuously maintained at the customer's expense to prevent the entry of any substance whatsoever into the city's water distribution system, whether by overpressure on the customer side of the meter or by reduced pressure (vacuum) on the city's side.

B. When any inspection or testing reveals that a back-flow prevention assembly is in an

13.12.090

unsatisfactory operating condition or otherwise in a nonpermitted condition under this chapter, it shall be repaired or replaced by the customer, at the customer's expense. Any necessary repairs, including replacement or overhaul of the assembly, if necessary, shall be completed within a reasonable time not to exceed thirty days.

C. In addition to the requirements of this chapter, all backflow prevention devices installed on fire protection systems must be installed in strict accordance with all current National Fire Protection Association Standards for the specific system involved. (Ord. 626 § 8, 1993)

13.12.090 Inspections.

A. All approved backflow prevention assemblies and other assemblies which are required by applicable federal, state, local or other regulation to be tested or inspected annually shall be subject to an inspection and certification by the city after each testing of the assembly. In instances where such assemblies, if not properly installed or maintained could pose a serious hazard to the city's water distribution system, those assemblies shall be subject to more frequent inspections.

B. The inspections required under this section shall be conducted to determine whether cross-connection or other sanitary hazards or violations of this chapter, or other applicable regulations, exist. Such inspections shall be carried out by an employee or contractor of the city who is a certified general tester. Such employee or contractor shall have the right to enter any premises supplied with city water in accordance with Section 1-16 of the city water and sewer code.

C. An air-gap approved by the water and sewer department shall be used to protect the city's water distribution system in any case where, because of security requirements, other prohibitions or restrictions, or because of the complexity of the piping system serving the premises, it will be impossible or impractical to make a complete inspection of an assembly or to otherwise ascertain whether any cross-connections exist which may affect the city's water distribution system. (Ord. 626 § 9, 1993)

13.12.100 Assembly installation.

A. An assembly shall be installed outside, aboveground, and adjacent to the meter on the customer side. Such assemblies should be protected from the elements. Where construction or equipment located presents siting problems for the assembly, a location variance may be granted by the water and sewer department, provided such request is made in writing and approval is granted prior to the installation of the assembly; in all cases the assembly must be installed before the first branch line leading off the service line. The type of assembly required shall depend on the degree of hazard where the following conditions exist:

1. Contamination. Any premises where any condition, device, practice or material may create an actual or potential introduction of water or substance which would be hazardous to the public health into the city's water distribution system, shall be protected by an approved air-gap separation or an approved reduced pressure principle backflow prevention assembly at the service connection to the premises.

2. Auxiliary Water Supply. Any premises where there is an auxiliary water supply,

whether or not directly connected with the city's water distribution system, shall be protected by an approved air-gap separation or an approved reduced pressure principle backflow prevention assembly at the city's service connection to the premises.

3. Pollution. Any premises where there is a water or substance that would be objectionable but not hazardous to the public health if introduced into the city's water distribution system, would constitute a nuisance, or be aesthetically objectionable, the city's water distribution system shall be protected by an approved double check valve assembly.

B. Assemblies and methods shall be installed by the customer, at the customer's expense.

1. Installation permits for the installation of all assemblies or methods shall be obtained from the water and sewer department prior to installation. A separate permit shall be obtained for each assembly or method to be installed, including replacement.

2. It shall be the duty of the person doing the work authorized by the permit to notify the water and sewer department in writing that the work is ready for inspection and testing. Such notification shall be given not less than twenty-four hours before the work is to be inspected and tested and shall be given only if there is reason to believe that the work done will meet the current requirements of the Uniform Plumbing Code, the city water and sewer code and the University of Southern California Standards, as referred to in the Manual of Cross-Connection Control.

C. The water and sewer department shall maintain a list of backflow prevention assemblies by type and manufacturer. The list, together with instructions for proper installation, shall be available to any customer

required to install a backflow prevention assembly.

D. The water and sewer department shall maintain a current list of certified general testers which shall be available to any customer required to maintain a backflow prevention assembly. (Ord. 626 § 10, 1993)

13.12.110 Testing.

A. Each backflow prevention assembly shall be tested by the customer, at the customer's expense, upon the occurrence of each of the following:

1. Upon installation or replacement of the assembly; and
2. Annually upon the anniversary date of the installation or replacement of the assembly; and
3. Upon the repair, overhaul or relocation of any assembly.

B. Such testing shall be accomplished by a certified general tester. Testing shall be in accordance with the procedures described in the current edition of the University of Southern California Manual of Cross-Connection Control.

C. No backflow prevention assembly shall be placed in service unless it has been tested and is functioning as designed and in a satisfactory manner. (Ord. 626 § 11, 1993)

13.12.120 Records.

Each customer shall maintain records, on forms approved by the water and sewer department, of the results of all tests, services, repairs, overhauls or replacements of backflow assemblies and fire protection systems. The customer shall promptly deliver a copy of each such record to the water and sewer department after completion of the activity for which the

13.12.130

record was made. The water and sewer department shall retain those records for a period of at least three years. (Ord. 626 § 12, 1993)

13.12.130 Fees.

In order to defray the city's costs in establishing and administering the provisions of this chapter, beginning with the mailing of the first city water bills in the month following the effective date of the ordinance codified in this chapter, a monthly fee of one dollar shall be charged to each customer required to install a backflow prevention assembly or method. The customer shall be entitled to one inspection per assembly or method of backflow prevention per calendar year. In the event more than one inspection is required, a fee of thirty dollars for each additional inspection shall be charged to the customer. (Ord. 626 § 13, 1993)

13.12.140 Exceptions not permitted.

No bypassing of required assemblies or methods of backflow prevention shall be allowed under any circumstances except for fire emergency. Wherever an uninterrupted water supply is required, multiple assemblies mounted for parallel flow shall be required. Temporary or construction service connections shall meet the same backflow prevention requirements as permanent connections. (Ord. 626 § 14, 1993)

13.12.150 Limitation.

This chapter shall not create any liability nor shall it impose any affirmative duty upon the city, its officers or employees. (Ord. 626 § 15, 1993)

13.12.160 Conflict with other ordinances or codes.

Whenever the provisions of this chapter shall conflict with any other provision of a Douglas city code or other ordinance, the provisions of this chapter shall prevail. Any provision contained in Sections 1-19, 1-20, 1-21, and 1-22 of the city water and sewer code, which are in conflict with the provisions of this chapter are repealed. (Ord. 626 § 16, 1993)